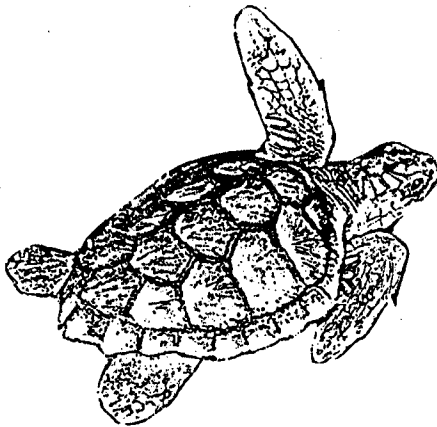


LOGGERHEADLINES

Sea Turtle News from South Carolina

June-July, 2001



Greetings!

Things have not slowed down since the last issue, and oh what a difference a couple of months make, as you will see in this *Loggerheadlines*.

Strandings

After the spring migration made its way through, strandings dropped back to lower levels. There were eight the first week in June and none the second week. The federal waters (beyond three miles) were opened to shrimping on June 16th, but only about a dozen boats were seen fishing during our survey flight on that day. Six turtles stranded the next week. State waters opened to shrimping on June 25th and 267 boats were counted during an aerial survey. Fifteen turtles stranded the last week of the month. In June, there were 26 loggerheads, one green turtle, one Kemp's ridley and one unidentified, for a total of 29. The loggerheads included four adults (two males, one female and one unknown).

High number of strandings continued to come ashore during July with 28 the first half of the month and 12 the second half for a total of 40. These included 29 loggerheads, one green, eight Kemp's ridleys, and two unidentified. In the total for loggerheads, there were 14 adults, including three males, seven females and four unknown. If the unknowns were females, which are most likely, then 38% of the strandings were adult females. This is the

highest number of adult females that have ever stranded in one month in South Carolina. If we compare the number of adults that stranded two weeks prior to and two weeks after the opening of state waters to shrimping from 1990 to 2001, this year is 62.5% higher than any number observed during the previous decade.

Office of Fisheries Management staff in the Marine Resources Division checked on the types of TEDs currently being utilized by the shrimp industry in South Carolina. A survey of 94 boats was conducted the last week of July. Sixty-seven percent were hard TEDs with the standard opening and 33% were using hard TEDs with leatherback openings. In the McClellanville and Georgetown areas 17 of 39 boats were using leatherback openings, while in Beaufort only five of 33 boats were. In the Charleston area 9 out of 22 boats had the leatherback opening. The higher use in the northern part of the state no doubt reflects the problem with crab pots in that area. Leatherback TEDS have much larger openings and better eliminate crab pots.

We think that with the winter die-off of white roe shrimp, the shrimpers realized the season would be very late. They also realized that it would probably open well after the spring leatherback migration. Therefore, there was no incentive to install leatherback TEDs this year, except in the north to exclude crab pots.

It appears that the majority of the boats rigged for the summer brown shrimp season with the standard-sized TED. In previous issues of *Loggerheadlines*, we discussed the size problem with the standard TED opening (see *Loggerheadlines* June-July, 2000) and the need for leatherback TEDs in order to protect

large sized loggerheads. This season is a very grim reminder that this problem still persists.

Rehabilitation

No live sea turtles stranded in June or July this year. The male loggerhead that stranded on May 14th at Kiawah died on July 10th at the South Carolina Aquarium. The necropsy showed he died from a lung infection.

The second loggerhead, "Kiawah", that stranded in May is still at the Sea Turtle Hospital at Topsail Island, NC.

You can monitor its progress at:

<http://www.seaturtlehospital.org/kiawah.html>.

Necropsy Summary

Post-mortems were performed on ten sea turtles during the months of June and July. Three post-mortems performed in June represent a 10% sample of the 29 turtles that stranded. Seven post-mortems in July represent a 17.5 % sample of the 40 animals that stranded in that month. All ten were female and three of them were adults. Two were Kemp's ridleys and the rest were loggerheads.

Two of the adult loggerheads contained shelled eggs and the other adult female was not in reproductive condition for this season. This female was feeding on horseshoe crabs. Nesting females do not generally feed during the nesting season.

Three of the turtles were in poor body condition and died from chronic causes. The other seven were in good body condition, were feeding just prior to death and had no apparent injuries. These were categorized as dying from acute causes.

Nesting News

Here are the nesting totals as sent in by each of the nest protection projects.

Nesting Activity Update

Through July 31, 2001

Thru 7/31	2001	2000	Diff.
Myrtle Beach S. P.	0	4	-100%
Huntington Beach S. P.	5	14	-64%
S.C.U.T.E.	42	75	-44%
South Island	94	116	-19%
Cape Island	522	615	-15%
Lighthouse Island	115	221	-48%
Dewees Island	5	1	400%
Sullivans/Isle of Palms	19	36	-47%
Folly Beach	47	51	-8%
Kiawah Island	152	205	-26%
Seabrook Island	16	14	14%
Botany Bay Isl & Plan	127	179	-29%
Edingsville Beach	35	33	6%
Edisto Beach S. P.	43	54	-20%
Edisto Beach	65	50	30%
Harbor Island	33	52	-37%
Hunting Island	42	32	31%
Fripp Island	43	37	16%
Pritchards Island	61	106	-42%
St. Phillips Island	13	14	-7%
Hilton Head Island	104	129	-19%
TOTAL	1583	2038	-22%

Nests Lost to Storm Tides:

During the latter part of July (21-22) the coastal areas experienced significant flooding due to the coupling of a nor'easter wind and a spring high tide. This flooding had a detrimental impact on previously laid sea turtle nests. Many of our nests were inundated and destroyed by rising sea levels. Moving from north to south, the following beaches experienced damage to or loss of nests.

Beach	No.
Dewees Island	5
Isle of Palms/Sullivans	1
Kiawah Island	19
Botany Island	5
Edisto Beach S. P.	2
Harbor Island	9
Pritchards Island	15
St. Phillips Island	3
Hilton Head Island	19

Regional News

North Carolina

Susana Clusella-Trullas, Assistant Sea Turtle Program Coordinator with the NC Wildlife Commission, sends us this report. Through the end of July, North Carolina had a total of 497 loggerhead nests in the state. One green turtle nest on Ocracoke was washed away by high tides. Stranding totals for June were 7 leatherbacks, 44 loggerheads, 4 greens and 3 unknown. In July, 3 leatherbacks, 23 loggerheads, 9 greens, 6 Kemp's ridley, and 3 unknowns stranded.

Georgia

Mark Dodd, sea turtle coordinator for Georgia DNR, reports that overall they have documented a declining trend in strandings over the last two years in Georgia. So far this year, strandings are down 10% from the previous year. Strandings were down 40% in 2000 when compared with 1999. They believe that the decline in strandings may be partially a result of the widespread use of leatherback TEDs by Georgia shrimpers. A survey of trawler captains indicated that almost half of the fleet switched to leatherback TEDs during the 2000 shrimping season. Also, the number of adult females found dead on their beaches has been reduced by at least 30%.

Based on the previous pattern of nesting, (one low year, three medium-high years), they predicted this would be a below average nesting year for loggerheads in Georgia. To date, there are approximately 820 nests on Georgia beaches, including four leatherback nests. Total loggerhead nesting will probably end up about 200 nests below their 12-year average (1,033 nests). Hatching appears to be going well, although they lost about 10% of their nest during the northeaster on July 22-23.

Florida

Sandy MacPherson, National Sea Turtle Coordinator for the U.S. Fish and Wildlife Service sends us this news from Florida. A new lighting system, initiated by the Florida Department of Transportation, is being tested in Boca Raton, Florida with hopes to resolve sea turtle disorientation associated with lights.

The asphalt-embedded light emitting diodes (LEDs) are bi-directional and shine from within flat plastic disks about the size of a grapefruit. The reactions of sea turtles, pedestrians, and motorists to the low profile-lights are being assessed.

The U.S. Fish and Wildlife Service is currently constructing a sea turtle web page. While under construction there is a web site that provides direct links to all six of the Washington Office's sea turtle "Learn More" pages. This page can be found at: <http://nothflorida.fws.gov/SeaTurtles/seaturtle-info.htm>

Research

The Marine Resources Division has finished its second year of the in-water study of sea turtles. The project's primary objective is to develop a methodology to establish a scientifically valid index of abundance for the northern subpopulation of the loggerhead turtle along the southeastern coast.

During late May through early August, research vessels and contracted shrimp trawlers used bottom trawls from Winyah Bay to St. Augustine, FL. to catch sea turtles and gather biological data on species, genetics, sex and a general health assessment.

In 2001, SCDNR's R/V "Lady Lisa", the UGA R/V "Georgia Bulldog" and a contracted shrimp trawler out of Beaufort, the "Lady Hilda", caught, processed, tagged and released alive 182 loggerheads, 12 Kemp's ridleys, and 3 greens compared to 178, 15, and 2, respectively in 2000. These turtles were caught in 610 trawl samples in 2001 and 628 samples in 2000. Tow times were limited by permit to 30 minutes actual bottom time to minimize stress to turtles.

Additionally, staff collected and tagged another 18 loggerheads aboard a contracted commercial shrimp trawler working out of Charleston. Of a grand total of 461 loggerheads tagged in the first two years, only one has been recaptured by the project. That juvenile was caught very near its release point

near the Charleston jetties after being at large for about a year.

Staff recorded animal health through blood samples, weight and external appearance. In August, staff collected two loggerheads off south Georgia that were in poor health due to previously acquired injuries. Those turtles were transported to Sea World for rehabilitation and were doing well at last report.

Notes from the Field

Hunting Island State Park

This season on Hunting Island, there was an interesting incident. A female loggerhead emerged on the beach at 11:30 p.m. and returned to the ocean at 7:30 a.m. She proceeded to dig 13 body pits with egg chambers dug in 12 of them. Each egg chamber was dug until she hit soil and then she would move on to another spot. This turtle will probably jump for joy when Hunting Island is renourished, along with the staff. ---*Paula von Weller*

Hilton Head Island

On an inventory this past weekend, they discovered another nest that appears to have been poached, bring the total to five for the season. Only nine eggshells were found. One of the known poached nests, that had some eggs remaining, did successfully hatch. ---*Kim Washok*

Pritchards Island

There has been a problem with hatchlings crawling landward into the dunes. Most of these events occurred after or during a late evening thunderstorm when the horizon over the ocean was darker than the horizon towards the city of Beaufort as a storm was passing offshore. On one occasion, the island staff rescued over 150 hatchlings in the dune field and released them on the seaward side. Also, the morphometrics study done by Katy Garland resulted in a total of 13 turtles tagged for the 2001 season. Three of the turtles re-nested and she was able to record multiple measurements to quantify measuring error. ---*Amber VonHarten*

South Island

On the morning of July 7th, during one of my aerial beach surveys, there was a single turtle track on the north end of South Island, in the Yawkey Wildlife Center. We circled the plane and came over the spot again. There below us was a green turtle just putting the finishing touches on covering her nest. We will keep you informed on hatching news. ---*Sally Murphy*

Announcements & Events

The incredible journey of a 200-pound male loggerhead turtle continues as the South Carolina Aquarium prepares to welcome the once illegally collected and exported turtle to its new home in the Great Ocean Tank. The turtle is believed to have been illegally collected from a beach in Florida and then transported to Canada without the proper CITES documents. He eventually ended up in the Aquarium De Quebec, where he was exhibited for several years. The Canadian facility wanted to relocate the animal during a renovation and the South Carolina Aquarium offered to provide it with a home. Since May, the turtles has been at the Animal Holding Facility where he is being acclimated to the new surroundings. He should be ready for release into the Great Ocean Tank this fall.

The turtle's addition will mark the beginning of a two-month celebration entitled ***Revel on the River: Entirely Turtles***, which includes new temporary turtle exhibits and educational programming highlighting these popular animals. --- *Angel Passailaigue, SCA*

Sally Murphy, *State Coordinator*
Charlotte Hope, *Biologist*
DuBose Griffin, *Intern, Sea Turtle Desk*

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